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Rulemaking Versus Adjudication: A Psychological Perspective

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RULEMAKING VERSUS ADJUDICATION: A PSYCHOLOGICAL PERSPECTIVE

JEFFREY J. RACHLINSKI*

ABSTRACT

Legal systems make law in one of two ways: by abstracting general principles from the decisions made in individual cases (through the adjudicative process) or by declaring general principles through a centralized authority that are to be applied in individual cases (through the rulemaking process). Administrative agencies have long had the unfettered authority to choose between the two methods. Although each method could identify the same solution to the legal issues that come before them, in practice, the two systems commonly settle upon different resolutions. Each system presents the underlying legal issue from a different cognitive perspective, highlighting and hiding different aspects of a legal problem. These differences produce different resolutions to legal problems. The single-case perspective of adjudication seems, in many ways, cognitively inferior to the broad perspectives that legislatures can incorporate into their decisionmaking processes. The adjudicative approach, however, has advantages that are less obvious. Notably, the adjudicative process is more likely to facilitate the adoption of simple, elegant rules for decisionmaking. The assessment of which approach is superior is, therefore, indeterminate. Each has its strengths and weaknesses that make it more or less appropriate for different contexts.

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I. INTRODUCTION

Administrative agencies can develop law in two distinct ways: adjudication and rulemaking. An agency relying on adjudication will function much like a common law court. It will develop a body of

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caselaw that will allow affected parties to infer general principles from the outcomes of the cases. By contrast, an agency relying on rulemaking will function much like a legislature. It will promulgate abstract rules in detail and then expect adjudicative bodies to apply those rules in individual cases. For an agency, the two approaches each have well-known advantages and disadvantages.¹ What is less well-known, or at least less widely appreciated, is that these two approaches to making law present the underlying issues that agencies address in such dramatically different psychological perspectives that the choice between the two approaches will bias the decision-maker toward different solutions. The choice of policymaking instruments thus might have unintended effects on the substantive law that agencies create.

Federal administrative agencies in the United States have long had wide discretion to choose between rulemaking and adjudication as their tool for adopting a particular regulatory policy.² Even when rulemaking seems sensible, courts will permit agencies to adopt policy through case-by-case adjudication.³ Most agencies also possess congressionally delegated authority to adopt substantive rules through administrative rulemaking procedures that will have the full force of law behind them.⁴ With few exceptions, neither the courts nor Congress have placed any meaningful restrictions on a federal agency's power to choose between rulemaking and adjudication.⁵ Furthermore, the standard of review of agency decisions is essentially identical, whether the agency has used either the rulemaking or adjudication process.⁶

Federal agencies have made full use of this discretion to choose among policymaking instruments. Some agencies, notably the National Labor Relations Board (NLRB), make policy largely through the adjudication process, while others, notably the Environmental Protection Agency (EPA), proceed largely through the rulemaking

1. See M. Elizabeth Magill, *Agency Choice of Policymaking Form*, 71 U. CHI. L. REV. 1383 (2004) (providing a detailed discussion of the implications of agency rulemaking versus adjudication).

2. See *SEC v. Chenery Corp.*, 332 U.S. 194, 202-03 (1947).

3. See *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 292-95 (1974).

4. See *Nat'l Petroleum Refiners Ass'n v. FTC*, 482 F.2d 672, 676 (D.C. Cir. 1973).

5. Agencies, of course, also have other means at their disposal to influence the behavior of the community that they regulate. They can draft informal policy memos, the officials who run the agencies can make public declarations of policies, or the agency can jawbone the targets of regulations through direct contact. Even though such methods are useful, they lead to more ephemeral policy than rulemaking or adjudication. When an agency wants to adopt lasting policy that binds the regulated community, it must promulgate a rule or develop law through the adjudication process. Robert A. Anthony, *Interpretive Rules, Policy Statements, Guidances, Manuals, and the Like—Should Federal Agencies Use Them to Bind the Public?*, 41 DUKE L.J. 1311, 1355 (1992).

6. *Ass'n of Data Processing Serv. Orgs. v. Bd. of Governors of the Fed. Reserve Sys.*, 745 F.2d 677, 681-86 (D.C. Cir. 1984).

process. Others combine the two procedures, making some policies through adjudication and others through rulemaking.

Implicit in the deference that both Congress and the courts have shown to agencies as to the choice between rulemaking and adjudication is faith that the agency itself is in the best position to identify the appropriate means of proceeding. An agency's choice of policy-making instruments, however, probably does not reflect a straightforward effort to identify the method that will produce the best substantive decision. The agency will be primarily concerned with choosing a policymaking method that will allow it to be efficient and yet survive judicial review.

Each technique also has advantages and disadvantages for the agency. Policies adopted through rulemaking cannot be applied retroactively; hence an agency that believes that it cannot easily predict the problems it will encounter might choose to proceed by adjudication. Policies adopted through adjudication, however, are often less definitive, thereby making it harder for the targets of the agency's regulatory effort to conform their conduct to the policy that the agency is attempting to adopt. A change in agency policy adopted through adjudication can also come as quite a surprise to the first party to whom it is applied. Courts sometimes deem it unacceptable for the agency to penalize the first entity that violates a new policy announced through adjudication.⁷ The Administrative Procedure Act (APA)⁸ also creates differences between the two processes. The APA explicitly insists that an independent administrative law judge presides over an adjudication—a requirement not duplicated by the rulemaking processes.⁹ This requirement, however, applies largely to the trial-level decisionmaker in an adjudication. The appeals process will eventually allow the agency itself to interject its policy concerns into the process. Likewise, even though *ex parte* contact and influence by political entities is thought to be less appropriate in an adjudicatory proceeding than in rulemaking, once again, this applies largely to the initial trial-level determination and not to the appeals process.

Several agencies have turned to adjudication out of sheer frustration with the rulemaking process. Notably, frustration with the slow pace of the rulemaking process ultimately led the Securities and Exchange Commission (SEC) to rely increasingly on an adjudicative approach.¹⁰ The SEC now largely makes policy through the use of

7. *Epilepsy Found. v. NLRB*, 268 F.3d 1095, 1102-03 (D.C. Cir. 2001).

8. 5 U.S.C. §§ 551-559, 701-706 (2000).

9. *Compare* 5 U.S.C. § 554 *with* 5 U.S.C. § 553.

10. ROBERTA S. KARMEL, *REGULATION BY PROSECUTION: THE SECURITIES AND EXCHANGE COMMISSION VS. CORPORATE AMERICA* (1982) (describing the Securities and Exchange Commission's evolution toward adjudication).

prosecutorial discretion, rather than through the rulemaking process.¹¹ Similarly, the National Highway Traffic Safety Administration makes its safety policies largely by issuing and defending recalls of vehicles it considers unsafe, rather than by issuing clear rules concerning auto safety.¹² Thus the choice of adjudication versus rulemaking reflects a mix of expedience, frustration, politics, and history.

Ideally, the choice of policymaking instruments would not affect the underlying substantive policy the agency adopts. If the NLRB believes that the National Labor Relations Act is best interpreted as forbidding an employer from undertaking an informal poll of the union members to determine if they still support the union,¹³ it should be able to reach that conclusion through rulemaking just as surely as it would through adjudication. The courts defer to an agency's choice of policymaking instruments, in large part, because judges fully understand the minefield in which the agencies operate. Agencies are in the best position to choose the appropriate course of action. Implicit in such a delegation of choice, however, is that the choice reflects only an effort to navigate the legal and political challenges and does not bias an agency toward one policy or another. Courts are sensitive to reviewing factors that might influence an agency's substantive mandate even as they are deferential to the agency's choice of procedure. Given good cause to believe that the agency's choice of procedure influences the substantive outcome, then it too might become the target of greater judicial, or even legislative, scrutiny.

The two approaches likely produce different psychological decisionmaking styles that facilitate different solutions to social dilemmas. The "representational structure" of the social problem differs depending upon whether an agency confronts the issue with rulemaking or adjudication. Adjudication will invariably highlight the individual litigant's story, while rulemaking will focus attention on broader, structural aspects of the problem. To be sure, this distinction is relative. No adjudication proceeds without some attention to the broader policy implications that the decision might have, and no rulemaking proceeds without some awareness of how individuals might be affected. Relative to a rulemaking, however, an adjudication will focus the decisionmaker's gaze upon the individual case, rather than the sociological, economic, or other structural aspects of the underlying issue. This difference in focus might thereby facilitate different resolutions of the underlying issue.

11. *Id.* at 95 (describing the SEC's "predilection for formulating regulatory policy through the prosecution of enforcement cases").

12. JERRY L. MASHAW & DAVID L. HARFST, *THE STRUGGLE FOR AUTO SAFETY* (1990) (describing the National Highway Traffic Safety Administration's evolution toward adjudication).

13. *Allentown Mack Sales & Serv., Inc. v. NLRB*, 522 U.S. 359, 361-63 (1998).

This factor has gone largely unnoticed in administrative caselaw. As noted, courts defer to agency choice of policymaking instruments, but they review rigorously the record created in an effort to ensure rationality in agency decisionmaking. As such, courts assess whether the record itself is adequate to support the agency's choice in whatever form it exists. Decades of research in cognitive psychology, however, suggest that the form in which information is presented can sometimes affect choice as much as the information itself. The judicial failure to assess whether the choice between adjudication and rulemaking is sensible is thus an oversight. Cognitive psychological research suggests that the choice of instruments matters tremendously, and thus should be reviewed no less thoroughly than the information in the record itself.

This Article develops and defends this thesis. Part II outlines the effect that the cognitive structure of a problem can have on decisionmaking. Part III discusses the cognitive difficulties that the adjudicative approach presents, and Part IV reviews the cognitive difficulties that the rulemaking approach presents. Part V concludes by assessing the factors that would indicate whether rulemaking or adjudication is more appropriate from a psychological perspective.

II. COGNITIVE STRUCTURE AND SOCIAL DECISIONS

Decisionmaking problems embody cognitive features that facilitate or impede different resolutions. For example, a decision that appears to reflect a choice among positive gains from the status quo biases decisionmakers toward making risk-averse choices, whereas a decision that appears to reflect a choice among negative losses from the status quo biases decisionmakers toward risk-seeking options.¹⁴ Consider the well-known "Asian Flu Problem" from Kahneman and Tversky:

Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the program are as follows:

If Program A is adopted, 200 people will be saved. . . .

If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved.¹⁵

14. Daniel Kahneman & Amos Tversky, *Choices, Values, and Frames*, 39 AM. PSYCHOLOGIST 341, 342-43 (1984).

15. *Id.* at 343.

When the options are described in this fashion, most people prefer the risk-averse option of saving 200 people.¹⁶ By contrast, consider the options as described below:

If Program C is adopted, 400 people will die. . . .

If Program D is adopted, there is a one-third probability that nobody will die and a two-thirds probability that 600 people will die.¹⁷

When the options are described in this fashion, most people prefer the risk-seeking option of a one-third chance of nobody dying.¹⁸ The choices, though identical, depend upon whether the decision's "frame" constitutes a choice among gains or a choice among losses.¹⁹

Decisionmakers can even be distracted by irrelevant items through what psychologists refer to as "contrast effects." As Kelman and his coauthors put it, "A person who prefers chicken over pasta should not change this preference on learning that fish is also available."²⁰ And yet, choices are commonly found to depend upon an irrelevant context. In one example, a greater percentage of undergraduates choosing between six dollars and a Cross pen favored the pen when a third alternative—a less attractive pen—was available.²¹ In Kelman's research, preferences for criminal penalties changed when inferior penalties were offered.²² For example, people choosing to sentence an unethical real estate broker for misconduct were less likely to choose prison time versus probation plus community service when a third option of probation plus counseling became available.²³

Research such as this demonstrates clearly that context affects choice. But can context also lead people astray? In these studies, there is no right or wrong answer. It is not clear whether it is better to try to save all 600 lives or to save 200 for sure. Neither is a particular criminal sentence necessarily the right penalty. These studies indicate that the presentation format matters more than we might think, but they do not, by themselves, indicate that different formats are more or less suited to quality decisionmaking.

Evidence exists, however, that some approaches to decisions are superior to others. For example, Gerd Gigerenzer has noted that Bayesian problems with correct answers can be made much easier to

16. *Id.*

17. *Id.*

18. *Id.*

19. *See id.*

20. Mark Kelman et al., *Context-Dependence in Legal Decision Making*, 25 J. LEGAL STUD. 287, 287 (1996).

21. Itamar Simonson & Amos Tversky, *Choice in Context: Tradeoff Contrast and Extremeness Aversion*, 29 J. MARKETING RES. 281, 287 (1992).

22. Kelman et al., *supra* note 20, at 301-03.

23. *Id.* at 296-97.

solve by simply rearranging the information provided.²⁴ As the prime example, consider the “rare disease” problem.²⁵ Suppose a doctor performs a test for a rare disease on a patient. The test is ninety-nine percent accurate and the disease occurs in one in 1000 patients with that patient’s profile. If the patient tests positive, what is the likelihood that the patient has the disease? The answer most people give is ninety-nine percent, but the real answer is actually less than ten percent. The reason is that in a rare illness, false positive results are incredibly common. In a population of 1000 people, only one has the illness, but one percent of the other 999 (or roughly ten people) will also test positive. Even though the one person with the illness tests positive as well, this means that any given population of 1000 people will produce eleven positive test results which include only one person who actually has the illness. As can be seen from this account, presenting the frequencies in the answer makes the problem much easier to understand and reduces misconceptions about the meaning of a positive test result.

Similarly, Leda Cosmides and John Tooby have noted that the apparent difficulty of such problems as the Wason selection task are easily avoided when the context of the problem is changed from the abstract to real-world situations.²⁶ The Wason selection task runs as follows: Four cards are laid out with letters on one side and numbers on the other. The face-up side of the four cards read “D,” “F,” “3,” and “7.” The task is to determine which cards need to be turned over to ascertain whether the following proposition is true: All cards that have “D” on one side have a “3” on the other. A majority of people faced with this task choose the card reading “D” and the card reading “3.”²⁷ In fact, the answer is the card reading “D” and the card reading “7.” The card reading “3” could have any letter on the opposite side without falsifying the hypothesis, and hence it is not useful. But if the card with the “7” on it has a “D” on the opposite side, then the assertion is false, and hence it must be examined.

If the cards are given different labels, however, the problem becomes easy. Suppose that the cards are labeled on one side with either the phrase “drinking coke” or “drinking beer” and on the opposite side with either “16 years old” or “25 years old.”²⁸ Also suppose that the cards are said to describe the age and beverage of people seated at a bar in a restaurant and the task is to ascertain which

24. GERD GIGERENZER, *CALCULATED RISKS: HOW TO KNOW WHEN NUMBERS DECEIVE YOU* 40-51 (2002) (describing how to represent Bayesian decisions as natural frequencies).

25. Ward Cascalls et al., *Interpretation by Physicians of Clinical Laboratory Results*, 299 NEW ENG. J. MED. 999 (1978).

26. Leda Cosmides & John Tooby, *Cognitive Adaptations for Social Exchange*, in *THE ADAPTED MIND* 163, 181-84 (Jerome H. Barkow et al. eds., 1992).

27. *Id.* at 181.

28. *Id.* at 183.

cards need to be turned over to determine whether the drinking-age law (twenty-one years) is enforced in this restaurant. Structurally, the problem is the same as the Wason selection task, but it is far easier. Most people correctly recognize that the cards reading "16 years old" and "drinking beer" need to be examined.²⁹ Even though turning over the card with the "3" on it in the first task was compelling, the beverage of the twenty-five-year-old is obviously uninteresting because he or she cannot be breaking the law. Adding a context that embodies the script of this familiar setting makes the logic transparent.

The context surrounding a problem can thus make it easier or harder to reach the correct result. Context has this effect because it highlights or hides aspects of the problem. The probabilistic form of the rare-disease problem hides the high number of false positives, whereas the frequentist presentation puts false positives front and center. The drinking-age context of the Wason selection task focuses attention on finding violations of a rule, which is what is needed for hypothesis testing. Context and imagery, however, can also be misleading. Consider the following two problems:³⁰

A. Imagine two perfect spheres floating in empty space; one is the size of a basketball and the other is the size of the planet Earth. Tightly wrapped around the equator of each is a string. A scientist wants to lengthen each string so that rather than tightly wrapped, the string hovers exactly one foot above the surface of each sphere at all points around it. Which sphere would require the most string to accomplish this, the basketball-sized sphere or the Earth-sized sphere; or is the amount of string needed the same for both?

B. Two variables, x and y , are defined by the following equations:

$$x = 2\pi(r_1 + 1) - 2\pi r_1$$

$$y = 2\pi(r_2 + 1) - 2\pi r_2$$

$$\text{Where } r_1 = 8,000 \text{ and } r_2 = 1$$

Which of the following is true: $x > y$, $x < y$, or $x = y$?

Intuitively, in problem A, the answer seems like it should be that more string is needed for the Earth-sized sphere, but the answer is that the same amount is needed for both (2π feet is needed in each case).³¹ When the same problem is stated algebraically, however, as

29. *Id.*

30. Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, 70 S. CAL. L. REV. 113, 126 n.57 (1996).

31. Because the circumference of any circle is equal to $2\pi r$ and the task requires lengthening the radius of each circle by one foot, the amount of string needed (x) is defined by the equation: $x = 2\pi(r + 1) - 2\pi r$, which reduces to 2π . *Id.*

in problem B, a little algebraic manipulation quickly leads to the right answer. Here, the imagery of the earth and the basketball directs attention away from the correct answer.

Even as to questions that have no correct answer, one set of contextual cues might be said to be better than another. In the contrast problem involving the Cross pen, it might be the case that most undergraduates fail to understand or appreciate that Cross pens are really a cut above ordinary pens. The addition of the inferior pen to the mix makes the Cross pen appear as it should appear—as a fancy pen. Similarly, in the framing-effects problem, it might be that the gains frame, on its own, fails to convey the full weight of the safe choice of saving 200 lives, which is to condemn 400 people to certain death. The loss frame makes this clear, but perhaps the loss frame makes the weight of such a decision foolishly unbearable. In fact, for framing problems, psychologists often suggest adopting efforts to recast problems into the opposite frame and to reconsider them.³²

Regulating by adjudication is likely to create a different cognitive context than regulating by rulemaking. Adjudication's case-by-case approach is apt to divert attention away from general systemic variables, highlighting instead the personalities and unique features of the individual case. Rulemaking's abstract approach is apt to do the opposite by hiding individual stories while highlighting systemic variables. For certain kinds of problems, the adjudicative approach might thwart the goals of the legal system. For others, the regulatory approach might be more troublesome. In other cases, it might simply be the case that each leads to different answers that cannot be said to be inferior or superior from a normative perspective.

Consider how this might operate with an example of a typical agency action. In deciding how to regulate the sale of smoked fish, the Food and Drug Administration (FDA) must set standards for processing fish so as to protect the public from adverse health effects associated with improperly cooked fish.³³ In so doing, the FDA might promulgate a rule identifying how smoked fish is to be processed. The rule might include such features as a minimum cooking time and temperature for fish to ensure that the process kills potentially harmful bacteria. Alternatively, the FDA might decide to act, case-by-case, against processors of smoked fish whom it believes use processes inadequate to kill harmful bacteria. The choice of policymaking instrument will emphasize different aspects of the regulatory problem. Should it proceed by rulemaking, the FDA will focus its atten-

32. Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *Inside the Judicial Mind*, 86 CORNELL L. REV. 777, 822-23 (2001) (suggesting that judges could benefit from considering multiple perspectives on the issues presented to them).

33. See *United States v. Nova Scotia Food Prods. Corp.*, 568 F.2d 240 (2d Cir. 1977).

tion on structural variables such as the historical rates of food poisoning associated with smoked fish and the costs to the industry of complying with regulation. The decision is apt to be quite abstract, and the agency is quite likely to focus on adopting a generic rule for the industry with few exceptions. In contrast, should it proceed against an individual manufacturer, the decision will be much more concrete. The target of the enforcement action might well present individual variations that make the agency much more willing to make an individualized decision. One might suppose, for example, that the FDA would be more likely to adopt species-specific cooking requirements for the smoked fish industry if it proceeds the way a court would than if it approaches the problem the way a legislature would.

The notion that an agency could reach a different policy conclusion depending upon whether it proceeds by adjudication or rulemaking might not be troubling. Each approach to policymaking has strengths and weaknesses. Just as the mathematical perspective is better suited to the string problem than the verbal perspective, the cognitive perspective that rulemaking creates might provide a superior perspective on a regulatory problem to that of adjudication. For other regulatory problems, the reverse might be true. If administrative agencies adopt the mechanism that is best suited to identifying the most sensible substantive policies, then the diverging perspectives are a strength, not a weakness. In contrast, if an agency is using a method that produces a misleading focus, then it might facilitate the adoption of an incorrect substantive conclusion. An agency that does not attend to the potential limitations of each perspective might choose a policy tool that is ill-suited to resolving the substantive policy question it must resolve. Determining the right tool thus requires an assessment of the cognitive limitations of adjudication and rulemaking.

III. THE COGNITIVE LIMITATIONS OF ADJUDICATION

From the cognitive perspective, the adjudicative approach to making legal rules has four defects relative to the rulemaking approach. First, adjudication necessarily entails a single-case perspective, which might blind the decisionmaker to the broader policy implications. Second, the single-case approach might introduce misleading details into the decisionmaking process. Factors that should not affect broader policy might influence the outcome of an individual case. Although an agency might be sensitive to this problem, the potential for a decisionmaker to rely on misleading factors is present in any adjudication. Third, adjudications involve determinations concerning real people who can produce sympathy or enmity in an adjudicator. Emotional reactions to individuals rather than dispassionate analysis of policy is apt to play more of a role in an adjudication than in a

rulemaking. Finally, an adjudication will focus the decisionmaker's attention on the allocation of responsibility, perhaps leading to excessive attributions of responsibility to individuals rather than circumstances beyond individuals' control.

A. *The Single-Case Perspective*

Taking issues one case at a time limits a decisionmaker's ability to identify a broader policy perspective. Assessing legal problems one case at a time can also distort a sense of scale and proportion. Outside of the legal context, psychologists have demonstrated that making judgments of value on a continuous scale through the lens of individual cases is challenging.³⁴ For example, one study demonstrated that individuals asked to state how much they were willing to pay for seven ounces of ice cream sold in a five-ounce cup provided higher estimates than individuals asked to state how much they were willing to pay for eight ounces of ice cream sold in a ten-ounce cup.³⁵ When making the judgments individually, people judged the seven ounces of ice cream to be a good value, being that it overflowed the small cup.³⁶ The eight ounces of ice cream, in contrast, seemed like a poor value, being that it failed to fill the cup in which it was sold.³⁷ When asked to make the judgments together, however, almost all of the participants assigned a higher dollar value to the eight ounces of ice cream.³⁸ Taken together, people sensibly focused on the important variable—how much ice cream was available.³⁹ In this study, the judgment made one cup at a time proved to be misleading.

Similar results have been documented in legal settings. Sunstein and his coauthors found such effects for punitive damage assessments.⁴⁰ In their study, people assigned punitive damages in either a fraud case involving financial losses or a products liability case involving physical injuries.⁴¹ The fraud case was written so as to seem outrageous compared to most cases of fraud (making it analogous to the seven ounces in the five-ounce cup). The products liability case was written so as to seem somewhat benign compared to most instances of injuries caused by defective products (making it analogous to the eight ounces in the ten-ounce cup). When evaluated separately, subjects assigned slightly higher damage awards in the prod-

34. See Christopher K. Hsee, *Less Is Better: When Low-Value Options Are Valued More Highly than High-Value Options*, 11 J. BEHAV. DECISION MAKING 107, 111-14 (1998).

35. *Id.* at 112-13.

36. *Id.* at 113.

37. *Id.*

38. *Id.*

39. *Id.*

40. Cass R. Sunstein et al., *Predictably Incoherent Judgments*, 54 STAN. L. REV. 1153 (2002).

41. *Id.* at 1174.

ucts liability case than in the fraud case.⁴² When evaluated together, the damage awards in the fraud case did not significantly change; however, the products liability case drew substantially higher damage awards than when it was evaluated in isolation.⁴³ When the participants in the study evaluated the two cases together, they were reminded that reckless conduct that inflicts physical injuries is more outrageous than reckless conduct that inflicts only financial injuries.⁴⁴ Thus, the more prominent harm elicited a smaller punitive damage award when judged by itself than when directly compared to a less prominent harm.⁴⁵ This result has also been replicated using prison terms in criminal cases.⁴⁶

Misleading contrasts such as those described by Sunstein and his coauthors are the product of making decisions one case at a time. It would be hard for an adjudicative body not to have a sense of whether an individual case before it was more or less extreme in some dimension than the typical type of case. Any one securities fraud case might seem more or less egregious than a typical securities case, regardless of how terrible a "crime" the case is in a broader sense.⁴⁷ Or imagine the perspective of the United States Fish and Wildlife Service (FWS) in deciding how to craft penalties in a case in which a rancher intentionally shoots and kills a grizzly bear.⁴⁸ From the perspective of the FWS, which spends much of its efforts on actions that have indirect, unintentional effects on species, the deliberate killing of the bear will seem to merit one of the more severe penalties the agency has available under the Endangered Species Act. The FWS might not stop to think about how culpable the action truly is in the broader context of its mission. Intentional killings of grizzly bears are rare (not to mention dangerous) and are far less a threat to grizzly bears than the loss of species habitat. If the FWS makes policy through this single case, its policy might be misguided.

Worse yet, as Sunstein and his coauthors noted, the FWS might not make any effort to compare the penalty for the rancher to penalties other agencies impose in far more socially destructive cases.⁴⁹ For example, the Occupational Safety and Health Administration (OSHA) might consider a manufacturer's failure to install yellow

42. *Id.* at 1177.

43. *Id.* ("[T]he median dollar award [for the products liability case] rose from \$1 million in separate evaluation to \$2.25 million when . . . directly compared to cases of financial harm.").

44. *See id.* at 1176.

45. *Id.*

46. *See generally* Jeffrey J. Rachlinski & Forest Jourden, *The Cognitive Components of Punishment*, 88 CORNELL L. REV. 457 (2003).

47. Sunstein et al., *supra* note 40, at 1171-72.

48. *Christy v. Hodel*, 857 F.2d 1324, 1326 (9th Cir. 1988).

49. Sunstein et al., *supra* note 40, at 1191.

tape on a staircase in its factory to be a trivial safety violation and not even penalize the manufacturer. From OSHA's perspective, this is a minor failing, but it is probably a more socially destructive oversight than the deliberate killing of an endangered bear. Agencies operating one case at a time, within their own domain, are apt to find it difficult to achieve a sense of scale or proportion for their regulatory efforts. At least, they will find it harder to do so than an agency operating by rulemaking.

Logical reasoning is generally more troublesome in an individual case than in the aggregate. Common fallacies of reasoning such as the conjunctive fallacy, base-rate neglect, and overconfidence are less prevalent when the underlying decision is treated as being one of a category of decisions.⁵⁰ Furthermore, presenting statistical evidence in the format of frequencies (for example, one in ten) often produces a more rational reasoning process than statistical evidence presented in the format of subjective probability (for example, ten percent).⁵¹ Single cases, however, are apt to trigger a subjective format and hide the commonalities a case might have with a broader category. An adjudicative approach will seem to present a unique problem, whereas a rulemaking approach clearly requires a decision that should apply to an aggregation of cases.

B. The Focus on Unique Features of a Case

Making policy through individual cases can give unique features of a case the power to suggest outcomes that would not be adopted through a rulemaking proceeding. Decisions in the individual case can often be influenced more easily by misleading extraneous factors than decisions in the aggregate. Consider the influence of what psychologists call counterfactual thinking on judgment.⁵² Counterfactual thinking refers to the "mental undoing" of the details of a story as a means of understanding the story. The mental undoing of an antecedent event in a longer story will confer importance on that antecedent event, making it a source of emotion and attribution.⁵³ Outcomes are often the product of a long series of antecedent details. Some of the details are common to many similar scenarios and hence are important to such stories, but others might be unique. Because the features that make an antecedent event easy to undo are not al-

50. See generally Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking*, 39 MGMT. SCI. 17 (1993).

51. GIGERENZER, *supra* note 24, at 36-38.

52. See Gary L. Wells & Igor Gavanski, *Mental Simulation of Causality*, 56 J. PERSONALITY & SOC. PSYCHOL. 161 (1989) (discussing the role of counterfactual reasoning in the assignment of responsibility).

53. *Id.*

ways well correlated with their true importance in the story, counterfactual thinking can be misleading.

Consider a study of counterfactual thinking that illustrates the point.⁵⁴ In the study, people were asked to determine the amount of compensation for the survivors of a deceased airplane passenger.⁵⁵ The materials noted that the airplane crashed in a remote northern wild.⁵⁶ The passenger had initially survived the crash but succumbed to the bitter conditions as he struggled toward a settlement.⁵⁷ Half of the study's participants were told that the passenger died after walking to within seventy-five miles of the nearest settlement and the other half were told that the passenger died after walking to within one-quarter of a mile from the nearest settlement.⁵⁸ People in the latter condition were willing to award more in compensation than people in the former condition.⁵⁹ The authors of this study explain that it is easier to imagine that the passenger could have survived when he made it but one-quarter of a mile from safety.⁶⁰ Like a soldier killed on the last day of a long war, his death seems more regrettable and induces greater compensation.⁶¹

Adjudicative bodies invariably get access to the ephemeral details of a story that can then lead to misleading judgments. Suppose an agency had to decide whether it was appropriate to compensate the survivors of a pilot who died under similar circumstances as the passenger in the study; perhaps because the plane was being flown under a government agency contract and the question is whether the pilot was a government employee. No agency would sensibly adopt a rule in which the status of the compensation would depend upon how far the person walked after the crash. And yet, if the hypothetical agency decided to use this case as a policy vehicle to create some precedent on the issue, the decision might depend upon how far the pilot walked. If operating through the rulemaking process, however, the individual facts of any one case would not be before the agency.

C. Sympathy and Empathy in Individual Cases

Individual cases also likely invoke misleading emotional responses. Adjudications necessarily involve individuals who can evoke sympathy or empathy that can lead a decisionmaker to adopt a rule

54. Dale T. Miller & Cathy McFarland, *Counterfactual Thinking and Victim Compensation: A Test of Norm Theory*, 12 PERSONALITY & SOC. PSYCHOL. BULL. 513, 516-18 (1986).

55. *Id.* at 517.

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

that arises from an emotional reaction to a specific individual rather than rational deliberation on the underlying issues.

The emotional reactions to a decision will seem entirely different in an individual case. Consider the difference between a proceeding involving a potential fine against an airline for an accident that resulted in an individual's death and a rulemaking proceeding on a safety precaution. Both the adjudication and the rulemaking are likely to include testimony on the relative costs and benefits of the safety device. The adjudication, however, will also include extensive individual testimony about the personal loss suffered by the victim's family. The emotional content of individual testimony will make it difficult for the adjudicative body to put the implications of the airline's failure to undertake the safety precaution in perspective. The adverse consequences of the absence of the safety precaution will be salient, while the costs of the precaution will seem pallid by comparison.

The heightened potential for emotional reactions that arises from the active presence of individuals in adjudication can skew the decisionmaking process in unintentional ways as well. Psychologists have argued that in many cases people make decisions in reliance on an "affect heuristic."⁶² That is, people sometimes experience a strong and immediate reaction to stimuli. This reaction then guides further assessment of related stimuli.⁶³ An affective reaction to a party before an administrative proceeding can thereby lead to a decision based upon that emotional reaction. Furthermore, as Dan Simon has observed, legal decisionmakers struggle to maintain consistency. The consequence of an affective response might be greater than just a favorable decision on the merits that might have no effect on future cases. An adjudicative body that empathizes with a litigant is apt to adopt a rule that favors that litigant. Simon has noted just such a tendency in his research.⁶⁴ In his research, people asked to adopt one of two competing legal rules favor the rule that supports litigants that they like and disfavors litigants that they dislike. Even though people could just side with favored litigants based on preferable factual conclusions, they tend to also favor them on legal conclusions.⁶⁵

The annals of famous administrative law cases, in fact, include a prime example of exactly this type of motivated empathetic reason-

62. See Paul Slovic et al., *The Affect Heuristic*, in *HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT* 397 (Thomas Gilovich et al. eds., 2002).

63. *Id.* at 400.

64. Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 520-49 (2004) (reviewing psychological research on coherence-based reasoning).

65. *Id.*

ing. In *O'Leary v. Brown-Pacific Maxon Inc.*,⁶⁶ an adjudicative body of the Department of Defense had to determine whether a surviving mother of a government contractor was entitled to survivor benefits.⁶⁷ The benefits were only available if the employee had died from activity within the scope of his employment.⁶⁸ In fact, he had died when, while recreating on a beach within a military base, he tried to rescue two men stranded on a reef.⁶⁹ Sympathy for the employee and his mother determined not only the outcome but the course of two separate bodies of law. An adjudicative body determined that his death had indeed occurred during the scope of his employment,⁷⁰ thereby creating precedent for other unfortunate victims of recreational activity. Furthermore, a reviewing court determined that the appropriate standard of review was one of deference to the administrative agency.⁷¹ Decades later, the precedent remains well-cited to support a whole range of administrative decisions.⁷² In all likelihood, all that the case really supports is the proposition that "surviving mothers get benefits."⁷³ Sympathy for an unfortunate parent, rather than reasoned assessment of the situation, created an influential precedent that is, at least in administrative law, a lingering nuisance.

A regulatory body acting through the rulemaking process certainly cannot be said to be occupied by people devoid of emotion. Rulemaking procedures on safety regulations include less testimony by individuals, however, than adjudication. A rulemaking proceeding also involves two other features that minimize the likely impact of emotional content on decisionmaking. First, it is prospective. Adjudicative bodies act retrospectively and will thus always have injured victims or aggrieved parties before them. Regulatory bodies making rules, however, address future conduct. Hence, even though a decision to refrain from adopting a mandatory safety precaution is apt to result in some death or injury that could have been prevented, an agency using rulemaking acts without knowing the future victim's identity. Second, rulemaking procedures force the agency to confront trade-offs. The agency will engage in a rulemaking with the full

66. 340 U.S. 504 (1951).

67. *Id.* at 505-06.

68. *Id.* at 506.

69. *Id.* at 505.

70. *Id.* at 506.

71. *Id.* at 508.

72. See STEPHEN G. BREYER ET AL., ADMINISTRATIVE LAW AND REGULATORY POLICY 270-71 (5th ed. 2002) (discussing *O'Leary*).

73. PETER L. STRAUSS ET AL., ADMINISTRATIVE LAW: CASES AND COMMENTS: MANUAL FOR TEACHERS, at IV-3A-1 (9th ed. 1995) (noting that one of the casebook editors "thinks the case stands for nothing more than the proposition that 'dependent mothers of drowned employees deserve \$9.38 a week'").

knowledge that imposing a safety precaution of some sort makes an activity more expensive and perhaps creates more risk, not less.⁷⁴

D. Focus on Attribution of Responsibility in Adjudication

An adjudicative process, with its emphasis on individual litigants, also seems more focused on attributing responsibility to individuals rather than to the situations in which people find themselves. Although there is little research directly on point, classic studies of attribution theory support this conclusion. For example, consider the tendency for individual actors to attribute their behavior to the product of the situation in which they find themselves, while the observers of the same behavior attribute the actor's behavior to the actor's personality.⁷⁵ Psychologists believe that this "actor-observer" effect results from the salience of the situation to the actor relative to the salience of the actor to the observer.⁷⁶ The phenomenon demonstrates the importance of perceptual salience in identifying the determinates of behavior. The adjudicative process places the individual front and center, thereby highlighting their behavior.

The adjudicative emphasis on individual responsibility is arguably erroneous. Social psychologists have long argued that people, at least in Western cultures, tend to attribute behavior excessively to stable traits, while ignoring aspects of a situation that can induce behavior.⁷⁷ The ordinary social interactions of everyday life seem to focus our attention onto the personality of those whom we encounter, less so than the situations that often actually determine their behavior. According to Ross and Shestowsky, we are too quick to assume that an ordinary misstep is the result of clumsiness, rather than a wet floor; that a dour expression indicates an unfriendly demeanor, rather than a passing mood; and that the wrong answer to a trick question indicates low intelligence.⁷⁸ The error arguably induces courts to attribute too much blame to individuals and not enough to social forces.⁷⁹

Thus, on the whole, the rulemaking approach seems to have a perspective that is better suited to managing social and economic interactions. Adjudicative bodies are apt to be persuaded by misleading signals from individual cases' emotional content, unable to see how

74. See Cass R. Sunstein, *Health-Health Tradeoffs*, 63 U. CHI. L. REV. 1533 (1996).

75. Richard E. Nisbett et al., *Behavior as Seen by the Actor and as Seen by the Observer*, 27 J. PERSONALITY & SOC. PSYCHOL. 154, 154 (1973).

76. *Id.*

77. Lee Ross, *The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process*, in ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 174 (Leonard Berkowitz ed., 1977).

78. See Lee Ross & Donna Shestowsky, *Contemporary Psychology's Challenges to Legal Theory and Practice*, 97 NW. U. L. REV. 1081, 1092-96 (2003).

79. *Id.* at 1087.

the resolution of the disputes before them fits into a broader scale, and focus excessively on individual conduct rather than social forces.

IV. THE COGNITIVE LIMITATIONS OF RULEMAKING

Proceeding by rulemaking has its pitfalls as well. First, rulemaking gives an agency fewer opportunities to address an issue. An agency proceeding by adjudication will often see an issue repeatedly, and in different contexts, before it makes a decision. Agencies proceeding by rulemaking, however, are apt to address the issue only once or twice. Second, agencies relying on rulemaking might be overconfident in their judgments. Adjudicative bodies know that they lack full information about a problem because they are only resolving the case before them, but a rulemaking body will believe it has all the information it needs to make good decisions. Such conditions can produce overconfidence in judgments, making agencies less willing to revisit previous decisions. Third, because agencies proceeding by rulemaking do not see repeated cases, they will rely far less on the natural human ability to identify sensible categories from a hodgepodge of evidence. Fourth, the lack of emotional content of the rulemaking decisions might actually be detrimental. Emotional reactions to situations often provide useful cues to good decisionmaking, even when logical analysis can be inconclusive or misleading.⁸⁰ Agencies operating through rulemaking will not quite know how rules feel when applied in individual cases. This absence might undermine the value of rulemaking.

A. *Limited Decisionmaking Perspectives*

The trial-and-error process that characterizes adjudicative systems has a clear advantage. Agencies, through adjudication, can review a whole range of decisions made in actual cases before making a final pronouncement. In contrast, rulemaking tends to be a one-shot game. The rulemaking process requires none of the fine sifting through the experiences of trial-level judges who have already encountered and attempted to resolve the problem.

In addition to less experience, the rulemaking process is more closely tied to a particular decision frame than the adjudicative process. An agency relying on rulemaking approaches any social problem from a single, natural frame created by the status quo. Because social problems always involve a trade-off of some interests against others, rulemaking's legislative approach necessarily favors the status quo. The cost to some interests of a change will loom large relative to the gains to any group that benefits from the change. In

80. See John F. Kihlstrom, *The Cognitive Unconscious*, 237 SCIENCE 1445 (1987).
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contrast, approaching the same social problems through adjudication can undo the framing problem that an agency would otherwise face. An agency that proceeds by adjudication will confront cases that present a shifting array of default conditions. Although the underlying rule might represent the same status quo that the agency faces, the parties who approach the court might come from many different positions. Trial-level judges in the agency will see the regulatory problem from different frames, whereas the rulemaking context leaves the agency trapped in a single frame.

Framing is just one example of the disadvantage of rulemaking's one-shot approach to regulation. Many of the errors or fallacies in judgment that psychologists have identified are deeply contextual. That is, sometimes even small variations in the nature of the problem can induce decisionmakers to engage in decisions that are more consistent with deductive logic. Addressing a problem repeatedly with different facts gives the agency more chances to adopt a perspective that avoids logical pitfalls. To be sure, an agency relying on adjudication might fail to recognize a better perspective when it encounters one, but an agency relying on rulemaking will not even have the chance to see these multiple perspectives, much less choose among them.

B. Overconfidence

Rulemaking is a more brazen act than adjudication. When an agency is engaged in adjudication, it knows that it only sees one dispute at a time and knows that perhaps the agency should limit its efforts to solving that single dispute. Hence, these agencies are apt to adopt simple, straightforward solutions to problems. When an agency proceeds by rulemaking, however, it can adopt any solution it pleases, no matter how complex. Rulemaking might induce an agency to engage in excess tailoring. That is to say, an agency engaged in rulemaking might adopt a solution so closely tied to the details of a particular situation that the solution will fail to address the broader social problem.

The concept of excess tailoring in problems of judgment arises directly from work in psychology and statistics.⁸¹ In some circumstances, simple decision rules predict future results better than the results of a multiple regression analysis.⁸² The reason for this is that the multiple regression can “overfit” data.⁸³ The regression model is so closely tailored to the unique pattern of results that it fails to un-

81. Gerd Gigerenzer & Peter M. Todd, *Fast and Frugal Heuristics: The Adaptive Toolbox*, in SIMPLE HEURISTICS THAT MAKE US SMART 3 (Gerd Gigerenzer et al. eds., 1999).

82. *Id.* at 19-21.

83. *Id.*

cover simpler patterns in the data. Consequently, a simple rule can work better than a rule derived from multiple regression. Adjudicative bodies, aware of the limitations of their approach, have little choice but to adopt simple, explicable resolution. Their authority is limited to simple solutions and their legitimacy depends upon their ability to explain their decisions in simple terms. When an agency proceeds by rulemaking, however, it is unlikely to resist the lure of complex solutions that might be excessively tailored to solving a particular version of a more general problem.

The problem of excessively tailored regulation is stunningly similar to the problems that regression analysis can create. The observations that a statistician feeds into a regression analysis invariably incorporate some measurement error. This measurement error limits the ability of the regression model to predict future observations (that is, its "reliability"). As statisticians note, the accuracy of the observations necessarily limits the reliability of the model. The regression equation, however, is itself blind to this concern. The analysis will produce a unique equation that best fits the data, including any measurement error. Statistical analysis accounts for this error by providing for an assessment of the predictive utility of the model (its R-squared).

The rulemaking process, however, contains no analogy to the R-squared. No complex test exists that can assess how well the model fits the real solution. Even assuming the agency has the relevant information about the story, the story might not be a good one upon which to base a major rulemaking initiative. The story that comes to the attention of the agency might be idiosyncratic. It might not be a good reflection of the underlying social problem it represents. Indeed, the very fact that a story rises to the attention of the national media almost ensures that it has unique properties. Agencies identify a problem, adopt a solution to cover the problem, and then move on. The reliability of the anecdote upon which the agency found its solution is only rarely part of what the agency considers.

Agencies proceeding by adjudication might face similar problems. After all, they inherently deal with stories. The stories judges review might be inaccurate and might not be representative of the broader category of cases they represent. When agencies proceed by adjudication, however, they can revisit an issue as new cases arise. Their initial resolutions of disputes are also apt to be modest, inasmuch as agencies often refuse to address issues outside of those in the case before them. Agencies that proceed by rulemaking, however, adopt an omnibus solution to a social problem based largely on a single anecdote; courts necessarily revisit the same problem frequently.

C. Failure to Rely on Categorization Skills

Repeated encounters with the same social issues also facilitate the remarkable human ability to categorize. The human brain seems quite adept at identifying patterns. Experts on artificial intelligence have as yet been unable to simulate the human power to identify structure and patterns. Today, machines that can make calculations millions of times more rapidly than the human brain still cannot recognize speech or handwriting with anything remotely like the accuracy that every human possesses. Chess-playing computers still cannot match the ability of chess grand masters, whose skills arise largely from their ability to identify complex patterns in the pieces. Indeed, psychologists argue that people tend to see patterns where none exist.⁸⁴ Superstition and myth arise largely from belief in non-existent relationships.

In the development of the common law, for example, judges have relied heavily on pattern recognition abilities. The process of common law evolution consists largely of determining whether a new case is similar to older ones or whether a new category or exception needs to be carved out. Consider products liability law as an example. Products can injure, and have injured, people in an almost infinite variety of ways. And yet, the courts in the United States have managed to distill this infinite variation into three causes: manufacturing defects, design defects, and failure to warn. Every injury a product can cause fits relatively neatly into one of these three causes. The courts have also developed a body of rules governing the allocation of responsibility for injuries attributable to each of these three causes. Agencies that rely on the adjudicative process, especially the National Labor Relations Board, adopt a similar style. They decide issues one case at a time and use this process to identify similarities and patterns in American labor relations.

D. Lack of Attention to Emotions

Finally, although sympathy is often cited as an impediment to the process of dispassionate reasoning necessary for adjudication, it is not entirely clear that emotions are so misleading. In everyday life emotions provide a useful guide as to how to interpret and react. Should this be less so in the adjudicative process? Emotional responses to various types of criminal acts or to types of plaintiffs probably have guided the development of the common law. But this is not necessarily problematic. Consider the treatment of trespassers by common law courts as an example. Landowners are not liable to

84. See generally THOMAS GILOVICH, *HOW WE KNOW WHAT ISN'T SO: THE FALLIBILITY OF HUMAN REASON IN EVERYDAY LIFE* (1991).

trespassers for negligent property maintenance and are responsible only for acts deliberately intended to harm trespassers. Surely, one can say that sympathies in these cases tend to lie with the landowners, hence the unsympathetic rule. When the trespasser is a child, however, the standard for liability is higher. Again, this might result from shifting sympathy to the child, but the result might well be sensible. Judicial sympathies might well develop sensible rather than foolish rules. A rulemaking process that hides the emotional aspects of a social decision might be missing an important cue.

V. RECONCILING AN INDETERMINATE ANALYSIS

From a cognitive perspective, each approach to regulation thus has advantages and disadvantages. The adjudicative approach creates a myopic focus that can induce an excess of attention to misleading details, even as it induces a kind of cautious approach that might avoid overconfidence and excessive regulatory tailoring. In contrast, the rulemaking approach can induce overconfidence and excessive tailoring, even as it allows the agency to concentrate on broader structural issues that underlie the regulatory problems an agency addresses. The question, then, from a cognitive perspective, is which features underlying a regulatory problem render it most suitable for rulemaking or for adjudication.

As a means of identifying the features of a regulatory problem that might support the use of one mechanism over another, consider three examples: environmental regulation, regulation of labor relations, and implementation of securities laws. Each has different characteristics that affect its suitability for rulemaking or adjudication as a means of identifying appropriate agency policy.

Environmental law might well present the paradigmatic case to illustrate the advantages of a rulemaking approach, for several reasons. First, the underlying issues in the subject present a high degree of scientific complexity, which requires expert explanation to the decisionmakers. In an adjudicative process, this will invariably be done in an adversarial fashion. Quirks about the expert or the manner in which the information is presented can influence an adjudicative body's assessment of the science, whereas a rulemaking approach will induce the agency to conduct more systematic surveys of the science. Second, a rulemaking approach to environmental policy is more likely than adjudication to direct the agency's attention toward trade-offs. Resolving an adjudication only requires an answer to a highly specific question posed by the parties before the adjudicative body. For example, a judge deciding whether a particular aluminum factory has incorporated the "best available control technology" under the Clean Air Act might find it difficult to assess the effect of its

decision on the economics of aluminum production, even though the statute requires some consideration of economic costs.⁸⁵ In contrast, if the EPA adopts a rule governing emissions for aluminum plants, it would consider the economics of the industry as a whole. In crafting air-quality regulations, the EPA could also assess whether there is any value in regulating aluminum factories more stringently or whether greater air-quality improvements might be had at a lower cost by regulating other sources of the pollution. Third, adjudication would focus a court's attention to allocating blame, rather than to the most efficient way to regulate air quality. The assessment of whether the factory is a dangerous polluter or a useful employer will predominate an individual adjudication, which might well distract from the issue of how best to manage the adverse effects of air pollution.

In contrast, the regulation of labor relations might best be served by reliance on adjudication. One of the primary objectives of having a mechanism for managing relationships between unions and management is to minimize the adverse economic consequences of labor disputes and maintain a level playing field between unions and their employers.⁸⁶ Regulations of labor relations are thus largely about maintaining peace and assigning blame, meaning that the NLRB is like a referee. Labor disputes are sometimes the product of an effort by one party to mistreat the other, which might involve risking the value of the company in a game of chicken. A system that emphasizes assignment of fault is perhaps the only sensible approach to regulating such an environment. Regulation is ill-suited to assigning blame for an outcome, but case-by-case adjudication will highlight the relative fault of the parties.

Furthermore, the ways in which employers and unions can obtain unfair advantages over each other and the ways in which they might interact that produce conflict are almost infinite and not easily predicted in advance. The system is entirely dynamic—unions and management will use any generally applicable rules to their best advantage. This dynamism makes it particularly difficult for an agency to foresee the consequences of any rule it might adopt. Thus, many of the advantages of rulemaking are lost in the labor relations setting. If agencies truly exhibit overconfidence in their rulemaking efforts and undesirable preferences for the status quo, then rulemaking is ill-suited to a dynamic environment. An agency trying to regulate an adversarial setting will commonly fail to foresee what effect the rules it adopts have. Nevertheless, overconfidence and preferences for the status quo will make the rules stick even after it becomes clear that they have unintended consequences. Creating policy by adjudication,

85. 42 U.S.C. § 7412(d) (2000).

86. WILLIAM B. GOULD IV, *A PRIMER ON AMERICAN LABOR LAW* 1-8 (2d ed. 1986).

in contrast, will produce policies with a relatively narrow scope and will allow for a nimble mechanism for creating exceptions to ill-chosen policies.

Regulation of the securities markets presents an intermediate case. In many ways, the securities market is like labor relations: an adversarial relationship exists between those who issue or sell securities and those who buy them. That is to say, sellers benefit by extracting any extra dollar from buyers or by shifting any adverse risk onto the buyers. Thus, just as in the labor relations context, the parties will be seeking ways to use regulations to their own advantage and to the disadvantage of the opposing party. In particular, sellers, as repeat players, will be apt to ferret out ways of using the rules to extract as much as they can from buyers. This regulatory environment seems just as ill-suited to regulation as the labor context.

At the same time, however, the relationship between buyers and sellers is not completely adversarial. Both buyers and sellers gain when sellers have the means to convey information in a credible fashion to buyers. Distrust and informational asymmetries are costly—they impede otherwise efficient transactions.⁸⁷ Uniform, well-crafted rules concerning disclosure support such an environment. Just as with environmental issues, such rules are probably best accomplished through the rulemaking process, which highlights broader, systemic issues, rather than the allocation of responsibility for undesirable investment outcomes. Thus, the regulation of the securities markets emphasizes the need for a textured, problem-specific approach.

The indeterminacy of the analysis renders recommendations difficult to make. As the examples show, the underlying cognitive landscape varies both between and within areas of law. The variegated cognitive landscape might thus be said to support the wisdom of the Supreme Court's approach to agency choice of rulemaking versus adjudication. The Court has adopted an approach that affords agencies unfettered choice between proceeding by rulemaking or adjudication.⁸⁸ Agencies might well be in a far better position than the courts to assess the nature of the cognitive landscape in which they must regulate. Indeed, the case in which the court first embraced this flexibility, *SEC v. Chenery Corp.*,⁸⁹ supports these arguments. The SEC asserted that it needed the flexibility to prosecute corporate managers engaged in a novel form of self-dealing; therefore, it noted that adjudication was ideal because the underlying issue was the

87. George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488-500 (1970).

88. Magill, *supra* note 1.

89. 332 U.S. 194 (1947).

blameworthiness of the managers' conduct.⁹⁰ When the issue is the appropriate content of a quarterly corporate report, however, rule-making is apt to be a more sensible approach. As to a closer case, the agency is apt to be in the best position to survey the landscape and use the most appropriate tool.

All of which would be a sensible conclusion, except that it is largely a "just-so" story. History, administrative efficiency, and the rigors of the rulemaking process have largely dictated agency choice. If so, then agencies might well be using processes that are cognitively ill-suited to their mission. This Article might then be taken, in part, as a plea to agencies to consider the cognitive landscape in which they operate. But in addition, could a cognitive mismatch between an agency's task and its choice of procedure support an argument that the agency's decision on the substantive merits should be overturned as arbitrary and capricious? Given the authoritative tone of the long-standing precedent in this area,⁹¹ that seems unlikely. Nevertheless, I conclude with a quick sketch of the argument.

An agency's decision can be said to be "arbitrary and capricious" if it is a rulemaking, or lacking in "substantial evidence" if it is an adjudication, if the agency record is incomplete.⁹² The obstacle to arguing that the procedure is cognitively deficient is that the completeness of the record is assessed from a rational-choice, rather than a psychological, perspective. If the record addresses all of the relevant issues then it can be said to be complete, regardless of the form in which the issues are presented or considered. The cognitive argument is more subtle than that. The concern is not that the issues are missing but that they are presented in such a way as to impede good decisionmaking. An adjudicatory approach to an issue that is best suited for a rulemaking approach might well include coverage of all of the relevant issues. After a regulated party challenges the decision, so long as the agency can assert that the record is complete, the agency decision will survive judicial review. Efforts to address the manner in which the agency makes its choice also might raise the concern that a reviewing court is being asked to probe into the mind of the administrator—which is also disfavored.⁹³ Even though the way in which information is presented can improve or impede the quality of the decision, the manner in which the issue of agency ra-

90. *Id.* at 203.

91. *NLRB v. Bell Aerospace Co.*, 416 U.S. 267 (1974).

92. *United States v. Nova Scotia Food Prods. Corp.*, 568 F.2d 240, 249 (2d Cir. 1977).

93. *Morgan v. United States*, 304 U.S. 1, 18 (1938) ("[I]t [is] not the function of the court to probe the mental processes of the Secretary . . .").

tionality is litigated will make the cognitive argument a challenging one upon which to succeed.

Those policymakers and scholars who already believe that regulatory agencies are sufficiently "ossified" would likely applaud the rejection of an argument that an agency approached the problem incorrectly. The ability of the regulated community to raise the insufficiency of the record on its own provides more than enough fodder to hobble administrative agencies. It seems a shame, however, that the courts are so unwilling to review the choice of instruments when the way in which the agency creates its record could be more important to the agency rationality than the contents of the record. As of now at least, an agency's choice of policymaking instrument is apt to remain a lost tool of agency rationality.